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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/833,015 | 04/10/2001 | Agoston Agoston | 6469-56984/MDJ | 8366 |
| 24197 | 7590 | 12/13/2005 | EXAMINER | |
| KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600 PORTLAND, OR 97204 | | | JONES, STEPHEN E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2817 | |

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

ELC

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|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 09/833,015 | | AGOSTON ET AL. | |
| | Examiner | | Art Unit | |
| | Stephen E. Jones | | 2817 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 34-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36-39 is/are allowed.
- 6) ☒ Claim(s) 1-10, 34 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/4/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 34 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

New claim 34 indicates that the cavity includes a slot directed perpendicular to the axis of the cavity, but it is not clear how a cavity which is comprised of free space can have a physical characteristic such as a slot so as to enable one to make and use the invention. Also, note that a slot such as claimed is not described in the specification so as to enable the examiner to guess as to what feature of the present invention Applicant is attempting to refer to, thus no art rejection could be applied to this claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 7 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bacher (of record).

Bacher teaches a microwave device as detailed below (also see Fig. 5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-6, 8-9, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacher in view of Weber et al. (both of record).

Bacher teaches a microwave device including: a coaxial input and output (e.g. 82 and 108) (i.e. adapters) (Claim 4); an airline conductor (e.g. 100) is connected to each of the coaxial conductors; the airline conductor connects to a transition interconnect pad

(e.g. 176) on a substrate; one end of the airline can be considered its input and the other end its output since the signal passes from one end to the other; the conductive pad can be considered a puck since it is wide and short in the same manner as the present invention (Claims 3, 5); and the airline conductor impedance is set essentially the same (i.e. impedance matched, e.g. see Col. 10, lines 8-14, and Col. 2, lines 11-24) (Claim 9).

However, Bacher does not explicitly teach a housing defining a cavity (Claims 1, 6, 8), or that the cavity is cylindrical (Claims 2) and that the impedance is substantially defined by the cavity and the airline conductor (Claim 35).

Weber provides the general teaching of a cylindrical housing for a microwave device.

It would have been considered obvious to one of ordinary skill in the art to have included a cavity housing such as taught by Weber for the Bacher device, because it would have provided the advantageous benefit of a well-known means for protecting the Bacher device from unwanted external signal influences/disturbances and also a means for containing the Bacher propagated signal such that it would not negatively affect other electrical/communications devices, thereby suggesting the obviousness of such a modification. Furthermore, as an obvious consequence of the combination providing a cavity and housing, the impedance of the airline is substantially defined by the housing cavity and the conductor since a fundamental characteristic of a transmission line impedance is its distance from the ground surface (i.e. the housing) and also the impedance characteristics of the transmission line material itself.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bacher and Weber et al. as applied to claim 8 above, and further in view of Baird et al. (all of record).

Bacher and Weber teach a microwave device as described above. However, Bacher does not explicitly teach that the impedance is 50 ohms.

Baird teaches that it is conventional for a coaxial line to be 50 ohms (e.g. see Col. 4, lines 16-28).

It would have been considered obvious to one of ordinary skill in the art to have selected the matched impedance (i.e. including the coaxial line) of the combination of Bacher and Weber to have been 50 ohms, especially since Bacher is silent as to the impedance of the line, and 50 ohms is a well-known and conventional impedance of a coaxial transmission line such as taught by Baird.

Response to Arguments

9. Applicant's arguments filed 9/22/05 have been fully considered but they are not persuasive.

Regarding Claim 7, Applicant argues that Bacher does not teach a means for securing the input coaxial cable to the input end of the airline conductor.

This argument is not convincing. The airline conductor (e.g. 100) is secured to the coaxial cable conductor by forming them integrally on the input and output ends (see Figs. 5, 6 and 3).

Regarding Claim 1, Applicant argues that Bacher does not teach that the airline is substantially parallel to the axis of the cavity because Bacher teaches a pre-bent springy section (e.g. 100).

This argument is also not convincing, since the Bacher conductor is generally in the longitudinal direction of the device, and especially since the term "substantially" is a broad term that thus does not require the conductor to be perfectly parallel as it appears that Applicant is arguing.

Regarding Claims 4 and 8, Applicant argues that Bacher does not teach an output coaxial adapter coupled to the airline conductor.

This argument is not persuasive. Bacher clearly teaches input and output coaxial adapters (78, 80) and the whole circuit is coupled together electrically such that the signal can pass from the input to the output.

Regarding Claims 3 and 5, Applicant argues that Bacher and Weber do not teach that the puck/pad extends into the cavity to control the airline.

This argument is not commensurate with what is claimed. The claimed interconnect extends into the cavity, but nothing in the claim requires the puck to be the part of the interconnect that extends into the cavity. Also, the pad of Bacher is in the air space of the device thus it is indeed extending in the cavity of the combination of Bacher and Weber.

Allowable Subject Matter

10. Claims 36-39 are allowed.

Conclusion


11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


STEPHEN E. JONES
PRIMARY EXAMINER

SEJ